MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Cameron

Drinking Water State Revolving Fund Green Project Reserve
Business Case

State Fiscal Year 2013 Intended Use Plan

Project Number DW291193-04

Loan Date: July 15, 2013

Green Estimated Costs: $5,700

Water System Improvements for Cameron, Missouri
Business Case

Summary

- The purpose of the project is to construct a new chlorine contact basin with transfer pumping for free chlorine contact time prior to the existing clear wells. The project will include anhydrous ammonia for an ammonia source for conversion to chloramines. The upgrade includes upsizing an 18" drain line to a 20" and relocating an existing 6" water main. This will provide looping and reduce leaking in the system.
- SRF Assistance Amount: $1,160,500.00
    - pipe replacement = $5,700 = 0.5%

Background

- The water source for the city's water system comes from the Cameron Reservoir Lake and Grindstone Reservoir. The city also supplies water to Clinton County Public Water Supply District No. 3.
- The distribution system consists of water distribution lines consisting of polyvinyl chloride (PVC) pipes, cast iron pipes, and ductile iron pipes ranging in size from 0.75-inches to 8-inches in diameter. The distribution system also includes three elevated tanks of 200,000 gallons, 300,000 gallons and 500,000 gallons.
- The existing water supply facilities are serving an estimated population equivalent of 12,500 people (including the service to the Western Missouri Correction Center) with an average daily water demand of approximately 1.5 million gallons and a peak day demand of approximately 2.25 million gallons per day (mgd). Recent history indicates that the water demands for the city have been steadily increasing by approximately two percent per year. Future estimated population served for the year 2028 will be approximately 18,300 people with an average daily demand of approximately 2.2 million gallons and 3.3 million gallons for peak daily demand.

Results/Conclusion

- The upgrades help reduce the need for flushing by looping the system and reducing the water loss. The old mains being replaced help prevent leaks providing less water loss.